

Curriculum Vitae
Aaron B. Wilson
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Byrd Polar & Climate Research Center
The Ohio State University
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EDUCATION

- Ph.D.* Atmospheric Sciences Program, The Ohio State University, Columbus, Ohio, 2013
Dissertation Title: Using the NCAR CAM 4 to confirm SAM's modulation of the ENSO teleconnection to Antarctica and assess changes to this interaction during various ENSO flavor events.
Advisor: Professor David H. Bromwich
- M.S.* Atmospheric Sciences Program, The Ohio State University, Columbus, Ohio, 2010
- B.S.* Atmospheric Sciences Program, The Ohio State University, Columbus, Ohio, 2002, *cum laude*

PROFESSIONAL APPOINTMENTS

- 2013-present: Research Associate II, Polar Meteorology Group, Byrd Polar and Climate Research Center, The Ohio State University
- 2013: Graduate Research Associate, Educational Outreach, Byrd Polar and Climate Research Center, The Ohio State University
- 2008-2012: Graduate Research Associate, Polar Meteorology Group, Byrd Polar and Climate Research Center, The Ohio State University.
- 2008-2009: The Ohio State University Excellence in Engagement and The Columbus Zoo and Aquarium Polar Frontier Project: Project advisor: Dr. Carol E. Landis, The Ohio State University

REFEREED PUBLICATIONS

- Justino, F., **A. B. Wilson**, D. H. Bromwich, Á. Avila, L.-S. Bai, and S.-H. Wang, 2016: Comparing the Arctic System Reanalysis (ASR) turbulent surface heat fluxes to contemporary global reanalyses. *J. Climate*, provisionally accepted.
- Ávila, A., F. Justino, **A. B. Wilson**, D. H. Bromwich, and M. C. Amorim, 2016: Extreme rainfall indices in Brazilian mountain regions and potentially induced hydrological hazards. *Env. Res. Lett.*, provisionally accepted.
- Justino, F., D. Lindemann, F. Kucharski, **A. B. Wilson**, D. Bromwich, and F. Stordal, 2016: Influence of Pacific Ocean during the MIS31 superinterglacial climate. *Scientific Reports*, provisionally accepted.
- Moore, G. W. K., D. H. Bromwich, **A. B. Wilson**, I. Renfrew, and Lesheng Bai, 2016: Arctic System Reanalysis improvements in topographically-forced winds near Greenland. *Q. J. R. Meteorol. Soc.*, doi: 10.1002/qj.2798, in press.

- Goodwin, B. P., E. Mosley-Thompson, **A. B. Wilson**, S. E. Porter, and M. R. Sierra-Hernandez, 2016: Accumulation variability in the Antarctic Peninsula: The role of large-scale atmospheric oscillations and their interactions. *J. Climate*, **29**, 2579-2596, doi:10.1175/JCLI-D-15-0354.1.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2016: Simulating the mutual forcing of anomalous high-southern latitude atmospheric circulation by El Niño flavors and the Southern Annular Mode. *J. Climate*, **29**, 2291-2309, doi: 10.1175/JCLI-D-15-0361.1.
- Bromwich, D. H., **A. B. Wilson**, L. Bai, G. W. K. Moore, and P. Bauer, 2016: A comparison of the regional Arctic System Reanalysis and the global ERA-Interim Reanalysis for the Arctic. *Q. J. R. Meteorol. Soc.*, **142** (695), 644-658, doi: 10.1002/qj.2527. (5 Web of Science citations, 9 Google Scholar citations)
- Wilson, A. B.**, D. H. Bromwich, K. M. Hines, and S.-H. Wang, 2014: El Niño flavors and their simulated impacts on atmospheric circulation in the high-southern latitudes. *J. Climate*, **27**, 8934-8955, doi: 10.1175/JCLI-D-14-00296.1. (5 Web of Science citation, 8 Google Scholar citation)
- Bromwich, D. H., J. P. Nicolas, A. J. Monaghan, M. A. Lazzara, L. M. Keller, G. A. Weidner, and **A. B. Wilson**, 2014: Corrigendum: Central West Antarctica among the most rapidly warming regions on Earth. *Nature Geoscience*, **7**, p76, doi: 10.1038/ngeo2016. (3 Web of Science citations, 6 Google Scholar citations)
- Bromwich, D. H., J. P. Nicolas, A. J. Monaghan, M. A. Lazzara, L. M. Keller, G.A. Weidner, and **A. B. Wilson**, 2013: Central West Antarctica among most rapidly warming regions on Earth. *Nature Geoscience*, **6**, 139-145, doi:10.1038/ngeo1671. (73 Web of Science citations – Highly Cited Paper, 124 Google Scholar citations)
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2012: Evaluation of Polar WRF forecasts on the Arctic System Reanalysis Domain: Part II. Atmospheric hydrologic cycle. *J. Geophys. Res.*, doi:10.1029/2011JD016765. (12 Web of Science citations, 18 Google Scholar citations)
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2011: Evaluation of Polar WRF forecasts on the Arctic System Reanalysis Domain: Surface and Upper Air Analysis. *J. Geophys. Res.*, doi:10.1029/2010JD015013. (17 Web of Science citations, 30 Google Scholar citations)

GRANTS

Current:

Collaborative Research: First Scientific Priorities from the ARM West Antarctic Radiation Experiment (AWARE), Contributed to the project design and proposal

Funding Source: National Science Foundation, Division of Polar Programs

Total Budget: \$603,807; 6 mo. salary/3 years

Harnessing Education and Technology for Environmental Detection (HEATED), Contributed to the project design and proposal

Funding Source: Battelle Engineering, Technology and Human Affairs (BETHA)

Total Budget: \$58,308; 0.25 mo. salary

Pending:

Enhancing Weather and Climate Learning with Fluid Earth Viewer (FEVer), Co-Principal Investigator

Funding Source: National Science Foundation, Advancing Informal STEM Learning
Total Budget: \$305,000; 3 mo. salary/2 years

AWARDS & HONORS

- 2016, Ohio Supercomputer Center Annual Allocation Award, 400,000 Resource Units
- 2015, First Place – Flash Talk Competition, Ohio Supercomputer Center Statewide User Group, 5000 Resource Units
- 2015, NSF Sponsored DISertations initiative for the advancement of Climate Change ReSearch (DISCCRS) New Generation of Polar Researchers Leadership Symposium, Wrigley-Boone Marine Science Center, Catalina Island, CA. Selected from a pool of 92 early career scientists, recognized for outstanding research achievements, and brought together to form a new polar interdisciplinary research network.
- 2015, Ohio Supercomputer Center Annual Allocation Award, 350,000 Resource Units
- 2014, UCAR Travel Award, FORMOSAT-3/COSMIC Data Users' Workshop, Boulder, CO.
- 2014, Ohio Supercomputer Center Annual Allocation Award, 550,000 Resource Units
- 2013, The Fenburr Travel Scholarship, Department of Geography, The Ohio State University,
- 2011, Best Student Oral Presentation Award, American Meteorological Society 11th Conference on Polar Meteorology and Oceanography, Boston, MA.
- 2008, UCAR Travel Award, FORMOSAT-3/COSMIC Data Users' Workshop, Taipei, Taiwan

RESEARCH INTERESTS

Numerical Modeling (Climate Modeling and Weather Prediction), Tropical Teleconnections to High Latitudes, Polar Meteorology & Climate, Global Climate Change and Extreme Weather, Data Assimilation

INVITED PRESENTATIONS

- Wilson, A. B.**, D. H. Bromwich, L. Bai, G. W. K. Moore, F. Justino, I. Renfrew, S.-H. Wang, K. M. Hines, B. Kuo, Z. Liu, H.-C. Lin, and M. Barlage, 2016: Improving atmospheric circulation and turbulent heat fluxes with the Arctic System Reanalysis. *73rd Eastern Snow Conference*, Byrd Polar and Climate Research Center, The Ohio State University, Columbus, OH, June 2016.
- Wilson, A. B.**, 2016: Skype-a-scientist guest lecture. Dartmouth College, Hanover, NH, May 2016.
- Wilson, A. B.**, 2016: Extreme weather and climate change: Are they related? *7th Annual Meteorological Symposium*, Ohio University, Athens, OH, March 2016.
- Wilson, A. B.**, 2016: Extreme weather in a warming world: Impacts on Ohio and beyond. *Interfaith Power and Light State of the Climate – Annual Video Conference*, Trinity Seminary, Columbus, OH, March 2016.
- Wilson, A. B.**, 2016: Climate change & extreme weather: Challenges to Resiliency and Sustainability. *Department of Food, Agricultural and Biological Engineering Seminar Series on Sustainability*, The Ohio State University, Columbus, OH, March 2016.

- Cervenec, J., Mark, B., and **A. B. Wilson**, 2016: Climate change information and educational resources. *Science Education Council of Ohio Annual Conference*. Columbus, OH, January 2016.
- Bromwich, D. H., **A. B. Wilson**, and K. M. Hines, 2015: Modeling the tropical teleconnections to Antarctica: Interactions between flavors of El Niño and the SAM. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2015.
- Bromwich, D. H., and **A. B. Wilson**, 2015: Extreme weather in a warming world. *The Risk Institute Executive Education Series: Weather Disruption and Risk Management*. The Risk Institute, Fisher College of Business, The Ohio State University, Columbus, Ohio, November 2015.
- Wilson, A. B.**, 2015: Extreme weather in a warming world: Impacts on Ohio and beyond. *Ohio Public Private Partnership Fall Conference*, Ohio Department of Public Safety/Ohio Emergency Management Agency/Ohio Department of Transportation, Columbus, Ohio, October 2015.
- Wilson, A. B.**, 2015: Communicating climate change. *Central Ohio Metro Park Naturalist Training*, Blacklick Woods Metro Park, Reynoldsburg, Ohio, March 2015.
- Bromwich, D. H., S.-Y. Chen, **A. B. Wilson**, Y.-H. Kuo, Z. Liu, H.-C. Lin, and T.-K. Wee, 2014: A review of the impact of GPS-RO assimilation on weather analysis and prediction in the Southern Ocean and Antarctica. *8th FORMOSAT-3/Constellation Observing System for Meteorology, Ionosphere and Climate (COSMIC) Data Users' Workshop*. Boulder, CO, October 2014. [Available online at http://www.cosmic.ucar.edu/workshop_2014/presentations.html].
- Wilson, A. B.**, 2014: Computer Modeling, Climate Change, and Impact on Birds: Modeling Weather and Climate. *Byrd Polar and Climate Research Center Climate Explorations Series*, Grange Insurance Audubon Center, Columbus, Ohio, October 2014.
- Bromwich, D. H., L.-S. Bai, K. M. Hines, S.-H. Wang, and **A. B. Wilson**, 2014: The Arctic System Reanalysis. *OSC Summer Institute*. Columbus, Ohio, June 2014
- Wilson, A. B.**, 2013: Weather, Climate, and Using Models to Understand Patterns. *Improving Teacher Quality Workshop*, Columbus, Ohio, June 2013. Video presentation available at <http://vimeopro.com/byrdpolarresearchcenter/bprcjune-2013-workshops>.
- Bromwich, D. H., and **A. B. Wilson**, 2012: Arctic Climate Change. *Ohio Wesleyan University Spring Science Colloquium*, Delaware, OH, April 2012.
- Bromwich, D. H., and **A. B. Wilson**, 2012: Polar Meteorology Group. *Department of the State's International Visitor Leadership Program, Arctic Development and Security in an Age of Climate Change: A Project for Canada*, Columbus, OH, February 2012.
- Bromwich, D. H., and **A. B. Wilson**, 2010: Arctic Climate Change. *The Ohio State University, Department of Geography, Colloquium Series 2010-2011*, Columbus, OH, October 2010.
- Wilson, A. B.**, 2009: Cold science: Climate change research in Polar Regions. *Center of Science and Industry (COSI) Polar Adventure Weekend*, Columbus, OH, February 2009.

CONFERENCE PRESENTATIONS & EXTENDED ABSTRACTS

- Wilson, A. B.**, G. W. K. Moore, D. H. Bromwich, L. Bai, I. Renfrew, S.-H. Wang, K. M. Hines, B. Kuo, Z. Liu, H.-C. Lin, and M. Barlage, 2016: Improving the depiction of topographically-forced winds near Greenland with the Arctic System Reanalysis. *International Symposium on Atmospheric Boundary Layers in High Latitudes*. Byrd Polar and Climate Research Center, The Ohio State University, Columbus, Ohio, June 2016.

- Justino, F., **A. B. Wilson**, D. H. Bromwich, A. Avila, L. Bai, and S.-H. Wang, 2016: Arctic System Reanalysis (ASR) improved Northern Hemisphere extratropical turbulent heat fluxes. *International Symposium on Atmospheric Boundary Layers in High Latitudes*. Byrd Polar and Climate Research Center, The Ohio State University, Columbus, Ohio, June 2016.
- G.W. Kent Moore, D. H. Bromwich, **A. B. Wilson**, L. Bai, and I. Renfrew, 2016: Arctic System Reanalysis better depicts topographically-forced winds near Greenland. *13th European Polar Lows Working Group (EPLWG) Workshop*. Paris, France, April 2016.
- Wilson, A. B.**, D. H. Bromwich, L.-S. Bai, G. W. K. Moore, Y.-H. Kuo, Z. Liu, H.-C. Lin, and M. Barlage, 2015: Poster: Pushing the regional Arctic System Reanalysis to higher resolution: A comparison with the global ERA-Interim Reanalysis for the Arctic and beyond. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2015.
- G. W. K. Moore, D. H. Bromwich, **A. B. Wilson**, I. Renfrew, L. Bai, and M. DeBenedetti, 2015: Arctic System Reanalysis better depicts topographically-forced winds near Greenland. *American Geophysical Union Fall Meeting*, San Francisco, CA, December 2015.
- Justino, F., D. Lindermann, F. Kucharski, F. Stordal, **A. B. Wilson**, D. Bromwich, 2015: Poster: Oceanic response to topography and orbital forcing during the MIS31: The reversal effect of both forcing. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2015.
- Bromwich, D. H., K. W. Manning, J. G. Powers, K. M. Hines, D. Lubin, K. Pon, J. Wille, and **A. B. Wilson**, 2015: Polar Prediction. *The Year of Polar Prediction (YOPP) Summit*, World Meteorological Organization, Geneva, Switzerland, July 2015.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2015: Simulating anomalous high-southern latitude atmospheric circulation mutually forced by the Southern Annular Mode and El Niño flavors. *10th Antarctic Meteorological Observation, Modeling, and Forecasting Workshop*, British Antarctic Survey, Scott Polar Research Institute, Cambridge, U. K., June 2015.
- Wilson, A. B.**, D. H. Bromwich, Z. Liu, W. Kuo, S.-Y. Chen, H.-C. Lin, T.-K. Wee, and K. M. Hines 2015: Assimilating GPS RO in Polar WRF to improve surface pressure estimation over Antarctica. *Canadian Meteorological and Oceanographic Society 49th Congress and the American Meteorological Society 13th Conference on Polar Meteorology and Oceanography*, Whistler, British Columbia, June 2015.
- Bromwich, D. H., L.-S. Bai, K. M. Hines, **A. B. Wilson**, S.-H. Wang, Z. Liu, H.-C. Lin, M. Barlage, and Y.-H. Kuo, 2015: Arctic System Reanalysis: 15 and 30 km Versions. *Canadian Meteorological and Oceanographic Society 49th Congress and the American Meteorological Society 13th Conference on Polar Meteorology and Oceanography*, Whistler, British Columbia, June 2015.
- Mosley-Thompson, E., L. G. Thompson, S. Porter, B. Goodwin, and **A. B. Wilson**, 2014: Global Climate Change: Valuable Insights from Concordant and Discordant Ice Core Histories. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2014.
- Bromwich, D. H., **A. B. Wilson**, L.-S. Bai, G.W. K. Moore, B. Kuo, Z. Liu, H.-C. Lin, and M. Barlage, 2014: A comparison of the regional Arctic System Reanalysis and the global ERA-Interim Reanalysis for the Arctic. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2014.

- Wilson, A. B.**, D. H. Bromwich, Z. Liu, Y.-H. Kuo, S.-Y. Chen, H.-C. Lin, and T.-K. Wee, 2014: Improving surface pressure determination over Antarctica using GPS RO. *8th FORMOSAT-3/Constellation Observing System for Meteorology, Ionosphere and Climate (COSMIC) Data Users' Workshop*. Boulder, CO, **Poster**, October 2014. [Available online at http://www.cosmic.ucar.edu/workshop_2014/presentations.html].
- Bromwich, D. H., **A. B. Wilson**, K. M. Hines, and S.-H. Wang, 2014: Contrasting atmospheric circulation in the high-southern latitudes during central- versus eastern-Pacific El Niño events. *Mini-Conference: Connecting the Tropics to Polar Regions*. Lamont Campus, Palisades, NY, June 2014.
- Wilson, A. B.**, 2014: Prediction versus Projection: How weather forecasting and climate models differ. *Understanding Climate Change Risks and Identifying Opportunities for Mitigation & Adaptation in Ohio*. Columbus, Ohio, May 2014.
- Bromwich, D. H., and **A. B. Wilson**, 2013: Modeling SAM's modulation of the ENSO teleconnection to Antarctica. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2013.
- Bromwich, D. H., J. G. Powers, **A. B. Wilson**, K. Pon, and J. P. Nicolas, 2013: Numerical weather prediction for the Antarctic and the Arctic. *ECMWF- WWRP/THORPEX Workshop on polar prediction*, Reading, United Kingdom, June 2013. **Extended abstract in preprints** at http://www.ecmwf.int/newsevents/meetings/workshops/2013/Polar_prediction/papers_for_proceedings/index.html.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2013: Evaluating the variability of the ENSO-SAM teleconnection to Antarctica using the NCAR CAM 4. *American Meteorological Society 12th Conference on Polar Meteorology and Oceanography*. Seattle, WA, April 2013.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2013: Evaluating the impacts of ENSO flavors on the ENSO-SAM teleconnection to Antarctica using CAM 4. *The U.S. Climate Variability and Predictability Research Program (CLIVAR) ENSO Diversity Workshop*, Boulder, CO, February 2013.
- Bromwich, D. H., **A. B. Wilson**, S.-H. Wang, L.-S. Bai, K. M. Hines, J.P. Nicolas, 2012: Recent Arctic atmospheric circulation change in the fall analyzed via the Arctic System Reanalysis. *American Geophysical Union Fall Meeting*. San Francisco, CA, December 2012.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2012: Climate model simulations of ENSO-SAM teleconnections to Antarctica. *XXXII Scientific Committee on Antarctic Research (SCAR) Open Science Conference*, Portland, OR, July 2012.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2011: Polar WRF forecasts on the Arctic System Reanalysis domain: Atmospheric hydrologic cycle. *Workshop on Polar Simulations with the Weather Research and Forecasting (WRF) Model*, Columbus, OH, November 2011.
- Bromwich, D. H., K. M. Hines, **A. B. Wilson**, and A. Lucas, 2011: ENSO-SAM teleconnections and decadal variability. *IUGG 2011 General Assembly*, Melbourne, Australia, **Poster**, June 2011.
- Wilson, A. B.**, D. H. Bromwich, and K. M. Hines, 2011: Evaluation of Polar WRF forecasts of the atmospheric hydrologic cycle over the ASR domain. *American Meteorological Society 11th Conference on Polar Meteorology and Oceanography*, Boston, MA, May 2011.

- Hines, K. M., D. H. Bromwich, **A. B. Wilson**, and A. Lucas, 2011: ENSO-SAM teleconnections and decadal variability. *American Meteorological Society 11th Conference on Polar Meteorology and Oceanography*, Boston, MA, May 2011.
- Bromwich, D. H., and **A. B. Wilson**, 2009: Impact of grid nudging on Polar WRF. 4th *Antarctic Meteorological Observation, Modeling, and Forecasting Workshop*, Charleston, SC, July 2009.
- Wilson, A. B.**, D. H. Bromwich, K. M. Hines, and C. E. Landis, 2009: Enhancement of Polar WRF atmospheric and surface processes: Contribution to Arctic System Reanalysis and public awareness. *American Meteorological Society 10th Conference on Polar Meteorology and Oceanography*, Madison, WI, May 2009. **Extended abstract in preprints** at <https://ams.confex.com/ams/pdfpapers/152844.pdf>.
- Wilson, A. B.**, and D. H. Bromwich 2008: Numerical Weather Prediction and the Arctic. *National Science Foundation American Workforce and Research and Education Program (AWARE) FORMOSAT-3/Constellation Observing System for Meteorology, Ionosphere and Climate (COSMIC) Workshop at the 4th Asian Space Conference*, Taipei, Taiwan. Poster, October 2008.

TEACHING

(a) Class Instructor

Geography 4193: Independent Studies, Urban Heat Island Monitoring, The Ohio State University, Spring 2016

(b) Lectures Taught as Substitute (Primary Instructor)

Atmospheric Science 8900 Seminar: Exploring the Many Aspects of Global Warming, The Ohio State University, Spring 2016 (Professor David H. Bromwich)

Geography 5900: Weather, Climate, and Global Warming, The Ohio State University, Spring 2013, Autumn 2015 (Professor David H. Bromwich)

Earth Science 6750: Paleoclimatology, The Ohio State University, Spring 2013, 2015 (Professor Lonnie G. Thompson)

EDUCATIONAL OUTREACH

BPCRC Argumentative Writing Workshop for Science, Social Studies, and English Language Arts Teachers: A Summer Professional Development Opportunity. Byrd Polar and Climate Research Center, July 2015.

Presented and moderated **30 tours** of the Byrd Polar & Climate Research Center to school field trips (K-12 through college) and adult volunteer associations (e.g., Rotary) directly impacting **~1000 participants** from June 2011 – present.

Off-sight visit to Stevenson Elementary School in Heath, Ohio for Weather and Climate presentation and activity (120 - 3rd grade students)

Presented Tours to approximately 60 participants during Center for Latin American Studies and Byrd Polar Research Center's Latin America Night (2013, 2014)

Mentor to Chris Birchfield, The Ohio State University, Atmospheric Sciences Undergraduate, Columbus, OH, internship, meetings 3 days per week, June-July 2012.

Mentor to Austin Lucas, Metro High School, Columbus, OH, internship, meetings 2-3 days per week, September 2010-January 2011.

Mentor to Sarah Harkless, New Albany High School, New Albany, OH, science class research project, meetings 1 day per month, September 2009-March 2010.
Mentor to David Donahue, Metro High School, Columbus, OH, Polar Frontier Project, meetings 1 day per month, September 2008-December 2008.
Mentor to Brandon Klein, Metro High School, Columbus, OH, Polar Frontier Project, meetings 1 day per month, September 2008-December 2008.

PROFESSIONAL SERVICE

(a) 2015-present: State Climate Office of Ohio

- (i) Farm Science Review: Molly Caren Agricultural Center (MCAC), College of Food, Agricultural, and Environmental Sciences, The Ohio State University, London, Ohio, September 2015.
- (ii) Participated in the Midwest Climate Outlook and Drought Early Warning System (DEWS) Planning Workshop, Ohio River Basin, Louisville, KY, November 2015.
- (iii) The State Climate Office of Ohio Mesonet Meeting, The Ohio State University Union, Columbus, OH, March 2016

(b) Peer-reviewed for the following journals

Journal of Climate, Journal of Geophysical Research - Atmospheres, Bulletin of the American Meteorological Society, Journal of Hydrometeorology, Weather and Forecasting, Journal of Applied Meteorology and Climatology, Journal of Glaciology

(c) Social Media Weather Blogging

- (i) Maintain social media presence through Facebook at <https://www.facebook.com/dwweather>.
- (ii) Update current and forecast weather conditions for central and southwestern Ohio
- (iii) Provide relevant news stories concerning local and global weather and climate

EXHIBITS

Arctic Weather Modeling exhibit at the Battelle Ice Bear Outpost, *Columbus Zoo and Aquarium's Polar Frontier*, on display since May 2010.

COMPUTER SKILLS

Operating systems/techniques: Linux/UNIX, Windows, Supercomputing, and Parallel Processing
Numerical Modeling Platforms: Weather Research and Forecasting Model (WRF), Polar WRF, WRF Data Assimilation System (WRFDA), NCAR Community Atmosphere Model
Programming: FORTRAN, C-shell scripting, C++, IDL
Meteorological Analysis: NCAR Command Language (NCL), Read/Interpolate/Plot (RIP), Ferret, Grid Analysis and Display (GrADS), Climate Data Operators (CDO), and netCDF Operators (NCO)

PROFESSIONAL MEMBERSHIPS

American Meteorological Society (AMS)
American Geophysical Union (AGU)

Association of Polar Early Career Scientists (APECS)
Golden Key International Honor Society

VOLUNTEER & COMMUNITY INVOLVEMENT

Science Olympiad Volunteer: 2013-2016

The Ohio Academy of Science – Buckeye Science and Engineering Fair: 2016

Interfaith Power & Light: 2016